NSSL Algorithm Output Tables

Tables

This button, when pressed, displays a table pop-up menu (Figure 2.19) from which you can choose a Cell table, Mesocyclone table, or Tornado table.

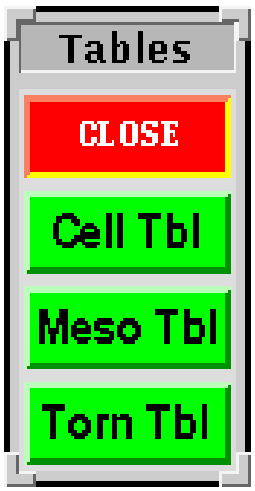


Figure 2.19: The Tables Pop-up menu.

Cell Tbl **Cell Tbl: Table of Composite Information from All NSSL Algorithms**

Click this button to bring up the NSSL Cell Table, which displays information from several algorithms about a particular storm and its characteristics. Some output and information is color coded for easy severity or classification identification. Storms are ranked by severity with the most severe cell at the top. Color coding information is explained in Chapter 4.

Meso Tbl **Meso Tbl: NSSL Mesocyclone Detection Algorithm Table Output**

The NSSL Mesocyclone Table provides information about mesocyclone and other storm-scale circulations. Information on mesocyclone characteristics include circulation type, strength, depth, motion, and Neural Network Probability function output. More information is given in Chapter 4.

Torn Tbl **Torn Tbl: NSSL Tornado Detection Algorithm Table Output**

Clicking on the NSSL Tornado Table button provides information about tornadic circulations within storms. Information displayed about tornadic circulations include size, strength, and motion. More information concerning the Tornado Table may be obtained in Chapter 4.

Prefer: User Preferences and Parameters Pop-up Menu

The **Prefer** button, when depressed, activates a pop-up menu with choices for user-configurable parameters. (Figure 2.20) Use this user preferences menu to: toggle between English and Metric units, turn NSSL algorithm-generated warnings and alarms on and off, link windows, enter a custom vector in the Storm Relative Velocity image, change the mesocyclone rank filter, enter options for auto-updateing and to change the range of data values displayed within the image windows.

Figure 2.20 User Preference pop-up menu

Linked Images

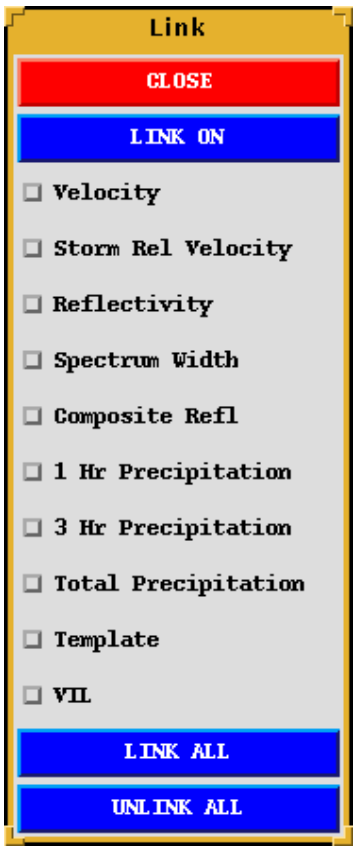


Figure 2.21: The Link Images Window

The Linked Images feature (Figure 2.21) allows the user to "link" all image windows so that if one designated image is zoomed to a particular set of coordinates, all linked images will be zoomed to the same point and at the same resolution. RADS starts up with the reflectivity, velocity, storm-relative velocity, and spectrum width images linked.

To turn linked windows on or off:

1. Click on the UNLINK ALL or click on the LINK ON button until it says **LINK OFF.**
2. CLOSE the **Link** pop-up menu, if desired.

Or, if you wish to use the link feature Link for specific images:

1. From the Prefer menu, click on
2. Click on the toggle buttons, ☐, next to the images you wish to link. They will turn red when selected. (If you wish to deselect a toggle button, click on it a second time.)
3. Click on the LINK ON button. The next time you zoom in one of the selected windows, these windows will zoom to the same magnification and to the same center point.
4. CLOSE the **Link** pop-up menu, if desired.

To link all images: click on the LINK ALL button. When you zoom again in any image window, all images will zoom to the same magnification and to the same center point.

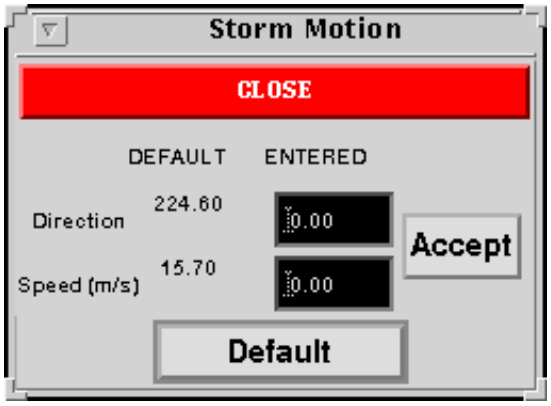


Figure 2.22: Storm Motion Vector Selection window

Storm Motion Storm Motion Vector Control and Display

This feature is used in conjunction with the Storm Relative Velocity image window. It allows the user to change the motion vector which is subtracted from the whole velocity image, allowing for better visualization of tornadic and mesocyclone signatures. (Figure 2.22)

Storm Relative Velocity images have the average storm motion subtracted in the displayed image. By default, the motion vector subtracted from the velocity images will be the average motion vectors of the storm cells as detected by the SCIT algorithm in the previous volume scan. The current components of the motion vector used to create the storm-relative velocity image are shown in yellow on the lower right of the image.

There are two Storm Relative Velocity vectors:

1. The Default vector, which is determined by the NSSL SCIT algorithm and is the average velocity vector of all storms in the previous volume scan.

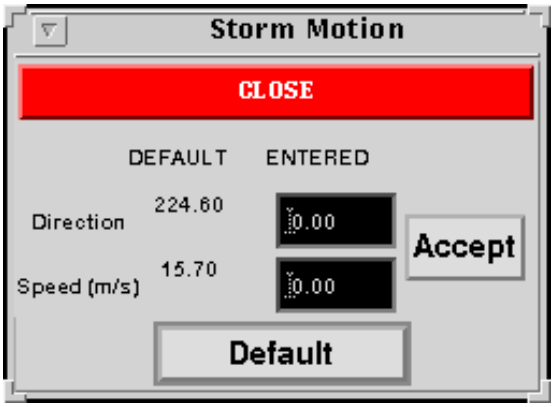
2. The Entered vector, which may be changed by the user to manually enhance storm features in the current volume scan.

   Note that you may "toggle" between the Default and Entered vectors, as shown in Figure 2.23.

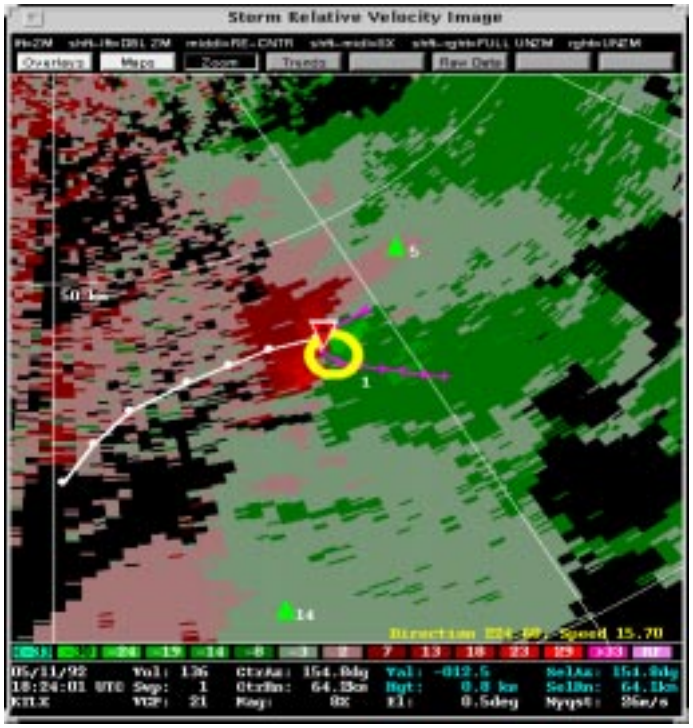
To enter a custom ("Entered") Storm Relative Velocity vector:

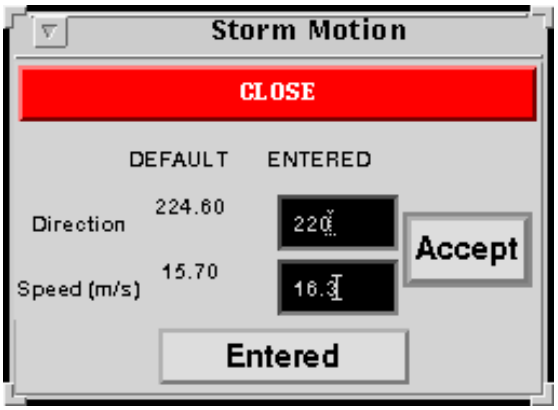
1. Open a Storm Relative Velocity Image by clicking on StmRlVel in the Velocity pop-up menu (VEL) on the Control Panel.
2. Click on Storm Motion the Control Panel. The Preferences pop-up menu, labeled "Prefer," will appear.
3. Click on Prefer in the Preferences pop-up menu. This activates the Storm Motion pop-up menu.
4. Click on the Entered data entry boxes(0.00 for Direction and Speed) and enter the desired direction and speed to be displayed.

NOTE: If you wish to use an "entered" value for the Storm Relative Motion rather than the default, the button at the bottom of the Storm Relative Motion window must read "ENTERED" and not "DEFAULT." This button is a toggle with the value representing the current setting.



Note that the button above says **Default.** In this image there is no **Entered** (user-specified) motion vector.





The image to the right reflects a storm vector entered by the user. Note that the button above says **Entered,** and a direction and speed are entered in the appropriate areas.

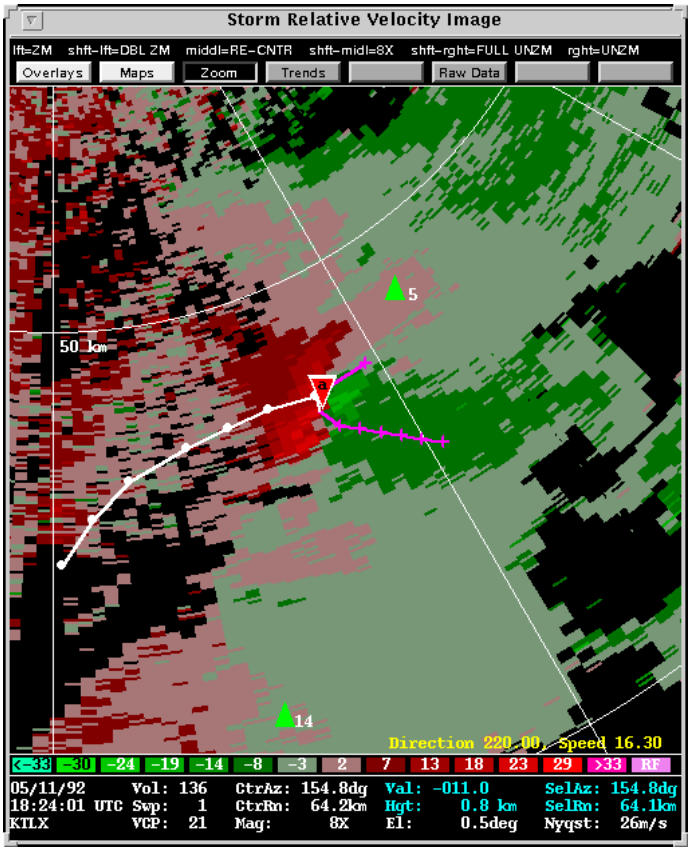


Figure 2.23: Example of the Default and Entered modes and toggling between them for Storm Motion.